CITY OF SAN JOSE
PROPOSED AMENDMENTS
TO
THE 2007 CALIFORNIA BUILDING CODE
CCR Title 24, Part 2
(final version)

Chapter 1 – General Code Provisions

The following sections will not be adopted:

Section 108.4
Permits, Fees, Applications and Inspections are covered in Title 24, Chapter 24.02 of the City of San Jose Municipal Code (SJMC).

Section 108.5
Right-of-Entry for Enforcement is covered in Title 24, Chapter 24.01 of the SJMC.

Section 108.7
Alternate Materials, Designs, Tests and Methods of Construction are covered in Title 24, Chapter 24.01 of the SJMC.

Section 108.8
Appeals Board is covered in Title 24, Chapter 24.02 of the SJMC.

Chapter 2 – Definitions

No amendments. However, there are definitions of terms in the SJMC that supersede those in this chapter. The following are the definitions in the SJMC:

24.01.200 Definitions
The definitions set forth in this Part shall govern the application and interpretation of this Title.

24.01.208 Alter or Alteration
"Alter" or "Alteration" means a change or modification in construction or building service equipment.

24.01.211 Administrative Authority
"Administrative Authority" is the Chief Building Official or a regularly authorized deputy.

24.01.215 Approved
"Approved," as to materials, types of construction, equipment and systems, refers to approval by the Building Official as the result of investigation and tests conducted by the Building Official, or by reason of accepted principles or tests by recognized authorities, technical or scientific organizations.

24.01.218 Approved Agency
"Approved Agency" means an established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when the agency has been approved by the Building Official.

24.01.224 Building Code
"Building Code" means the California Building Code, or CBC, 2007 edition, based on 2006 International Building Code promulgated by the International, including the appendix thereto, together with those omissions, amendments, exceptions and additions thereto as amended in Title 24 of the California Code of Regulations and in this Title.

24.01.227 Building Official
"Building Official" means the Chief Building Official, or a regularly authorized deputy.

24.01.230 Building Service Equipment
"Building service equipment" refers to the plumbing, mechanical, electrical and elevator equipment including piping, wiring, fixtures and other accessories which provide sanitation, lighting, heating, ventilation, cooling, refrigeration, fire-fighting and transportation facilities essential to the occupancy of the building or structure for its designated use.

24.01.228 Department
"Department" means the Department of Planning, Building and Code Enforcement.

24.01.230 Director
"Director" means the Director of Planning, Building and Code Enforcement.

24.01.233 Electrical Code
"Electrical Code" means the California Electric Code or CEC, 2007 edition, based on 2005 National Electric Code promulgated by the National Fire Protection Association, as amended and set forth in the California Building Standards Code, Title 24, Part 3 and in this Title.

24.01.236 Existing Building
"Existing Building" means a building legally erected prior to January 1, 2008 or one for which a legal building permit has been issued.

24.01.239 Fire Code
"Fire Code" is the California Fire Code or CFC, 2007 edition, based on 2006 International Fire Code promulgated by the International Code Council, including the Appendix thereto, together with those omissions, amendments, exceptions and additions there to as amended in the California Code of regulations and in the San Jose Municipal Code.

24.01.242 Listed and Listing
"Listed" and "Listing" are terms referring to equipment and materials which are shown in a list published by an approved testing agency, qualified and equipped for experimental testing and maintaining an adequate periodic inspection of current productions and which listing states that the material or equipment complies with accepted national standards which are approved, or standards which have been evaluated for conformity with approved standards.

24.01.245 Mechanical Code
"Mechanical Code" is the California Mechanical Code or CMC, 2007 edition, based on 2006 Uniform Mechanical Code promulgated by the International Association of Plumbing and Mechanical Officials, together with those omissions, amendments, exceptions and additions thereto as amended in Title 24 of the California Code of Regulations and in this Title.

24.01.248 CEC
"CEC" means the Electrical Code.

24.01.251 Occupancy
"Occupancy" is the purpose for which a building, or part thereof, is used or intended to be used.

24.01.257 Permit
"Permit" is an official document or certificate issued by the Building Official authorizing performance of a specified building, plumbing, mechanical, or electrical activity or any combination of such permits issued jointly by the Building Official.

24.01.260 Plumbing Code
"Plumbing Code" is the California Plumbing Code, or CPC, 2007 edition, based on 2006 Uniform Plumbing Code promulgated by the International Association of Plumbing and Mechanical Officials, including the appendix thereto, together with those omissions, amendments, exceptions and additions thereto as amended in Title 24 of the California Code of Regulations and in this Title.

24.01.263 Repair
"Repair" is the reconstruction or renewal of any part of an existing building, structure or building service equipment for the purpose of its maintenance.

24.01.266 Structural Observation
"Structural Observation" means the visual observation of the structural system, including but not limited to, the elements and connections at significant construction stages, and the completed structure for general conformance to the approved plans and specifications. Structural observation does not include or waive the responsibility for the inspections required by CBC Appendix Chapter 1 Section 109 and CBC Section 1704.

24.01.269 Structure
"Structure" is that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

24.01.272 Technical Codes
"Technical Codes" refer to those codes adopted by this Chapter containing the provisions for design, construction, alteration, addition, repair, removal, demolition, use, location, occupancy and maintenance of buildings and structures and building service equipment as herein defined which include but are not limited to California Building Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Existing Building Code, and California Historical Building Code.

24.01.275 CBC
"CBC" means the Building Code.

24.01.280 CEBC
"CEBC" means California Existing Building Code.

24.01.281 CFC
"CFC" means the Fire Code.

24.01.284 CMC
"CMC" means the Mechanical Code.

24.01.287 CPC
"CPC" means the Plumbing Code.

Chapter 4 – Special Detailed Requirements Based on Use and Occupancy

Section 402 – Covered Mall Buildings

Subsection 402.8 of Section 402 to be deleted and replaced with the following:

402.8 Automatic sprinkler system. *The covered mall building and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with the following:*

1. *The automatic sprinkler system shall be complete and operative throughout occupied space in the covered mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternate protection.*
2. *Sprinkler protection for the mall shall be independent from that provided for tenant spaces or anchors. Where tenant spaced are supplied by the same system, they shall be independently controlled.*

402.8.1 Standpipe System. *The covered mall building shall be equipped throughout with a standpipe system as required by section 905.3.3.*

Section 403 – High-Rise Buildings

Subsection 403.2 of Section 403 to be deleted and replaced with the following:

403.2 Automatic sprinkler system. *Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 903.3.5.2. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at the lateral connection to the riser for each floor.*

Section 404 – Atriums

Subsection 404.3 of CBC Section 404 to be deleted and replaced with the following:

404.3 Automatic sprinkler protection. *An approved automatic sprinkler system shall be installed throughout the entire building.*

Section 410 – Stages and Platforms

Subsection 410.6 of CBC Section 410 to be deleted and replaced with the following:

410.6 Automatic sprinkler system. *Stages shall be equipped with an automatic fire-extinguishing system in accordance with Chapter 9. Sprinklers shall be installed under the roof and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops, and storerooms accessory to such stages.*

Exception*: Sprinklers are not required within portable orchestra enclosures on stages.*

Chapter 7 – Fire resistance Rated Construction

Section 716.2.2 to be deleted and replaced with the following:

716.2.2 Hazardous exhaust ducts. *Penetrations of structural elements by a hazardous exhaust system shall conform to Sections 716.2.2.1 through 716.2.2.4.*

716.2.2.1 Fire Dampers. *Fire dampers are prohibited in hazardous exhaust ducts.*

716.2.2.2 Floors. *Hazardous exhaust systems that penetrate a floor/ceiling assembly shall be enclosed in a fire-resistance-rated shaft constructed in accordance with Section 707.*

716.2.2.3 Wall assemblies. *Hazardous exhaust duct systems that penetrate fire-resistance-rated construction shall be enclosed in a fire-resistance-rated shaft from the point of penetration to the outlet terminal, except where the interior of the duct is equipped with an approved automatic fire suppression system. Ducts shall be enclosed in accordance with Section 707 requirements for shaft construction and such enclosure shall have a minimum fire-resistance-rating of not less then the highest fire-resistance-rated wall assembly penetrated.*

716.2.2.4 Fire Walls. *Ducts shall not penetrate a fire wall.*

Chapter 9 – Fire Protection Systems

Sections 903.3.1.2 and 903.3.5.1.2 will not be adopted.

Section 903.2 to be deleted and replaced with the following:

903.2 Where required. *Approved automatic sprinkler systems shall be provided in the following:*

A. *Throughout existing buildings and structures where an increase is made to the floor area that results in the building exceeding 10,000 square feet.*

B. *Throughout existing buildings that are greater than 10,000 square feet wherein a change of occupancy that is more hazardous per Chapter 34 is made.*

C. *Throughout buildings and structures that are four or more stories in height, regardless of floor area.*

D. *Throughout new buildings and structures that exceed 6,200 square feet.*

E. *In new buildings and structures described in sections 903.2.1 through 903.2.17.2.6.*

Exceptions:

1. *When approved by the fire Code Official, spaces or areas of telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, when approved by the Fire Code Official and provided those spaces are equipped throughout with an automatic fire alarm system and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire-resistance walls and 2-hour fire-resistance-rated floor/ceiling assemblies.*

2. *Automatic fire sprinkler protection for fixed guideway transit systems shall be in accordance with Section 903.2.17.*

Section 903.2.7 to be deleted and replaced with the following:

903.2.7 Group R. *An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area.*

Exceptions:

1. *Detached one- and two-family dwellings not more than three stories above grade plane in height with a separate means of egress, unless specifically required by other sections of this code or classified as Group R-4.*
2. *Group U private garages accessory to a Group R-3 occupancy, unless attached to a multiple single-family dwelling(s).*
3. *Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.*
4. *Pursuant to Health and Safety Code Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.*
5. *Pursuant to Health and Safety Code Section 13143.6, occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).*

An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-4.

Add new subsection to section 903.2.7 as follows:

903.2.7.1 Balconies and decks. *Sprinkler protection shall be provided for exterior balconies, decks and ground floor patios of dwelling units where the building is of Type V construction. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies and decks that are constructed of open wood joist construction.*

Subsection 903.3.1 of Section 903 to be deleted and replaced with following:

903.3.1 Standards*. Sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1 or 903.3.1.3*

903.3.1.1 NFPA 13 sprinkler systems. *Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout by in accordance with NFPA 13 as amended in the Fire Code except as provided in Section 903.3.1.1.1.*

903.3.1.1.1 Exempt locations. *In other than Group I-2, I-2.1 and I-3 occupancies, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system, in accordance with Section 907.2, that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistant-rated construction or contains electrical equipment.*

1. *Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.*
2. *Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.*
3. *In rooms or areas that are of noncombustible contents.*

903.3.1.2 NFPA 13D sprinkler systems. *Where allowed, automatic sprinkler systems in one- and two-family dwellings shall be installed throughout in accordance with NFPA 13 D as amended in the Fire Code.*

Subsection 903.3.5.1.1 of Section 903 to be deleted and replaced with the following:

903.3.5.1.1 Limited area sprinkler systems. *Limited area sprinkler systems fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements:*

1. *Valves shall not be installed between the domestic water riser control valve and the sprinklers.*

   Exception*: An approved indicating control valve supervised in the open position in accordance with Section 903.4.*

2. *The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13 or NFPA 13D.*

Subsection 903.4 of Section 903 to be deleted and replaced with the following:

903.4 Sprinkler system monitoring and alarms. *All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised.*

Exceptions:

1. *Automatic sprinkler systems protecting one- and two-family dwellings.*
2. *Limited area system serving fewer than 20 sprinklers.*
3. *Jockey pumps control valves that are sealed or locked in the open position.*
4. *Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.*
5. *Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.*
6. *Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.*

Chapter 12 – Interior Environment

Section 1208.4 is deleted and replaced with the following:

1208.4 Single-Room Occupancies. *Single room occupancies shall otherwise conform to the requirements of the CBC except as provided below:*

A. The Single Room Occupancy (SRO) unit shall have a living room of not less than 150 square feet (13.9 m^2) of superficial floor area. An additional 100 square feet (9.3m^2) of superficial floor area shall be provided for each occupant of such SRO unit in excess of two.

B. The SRO unit shall be provided with a separate closet.

C. The SRO unit may be provided with a kitchen sink, cooking appliance and refrigeration facilities, each having a clear working space of not less than 30 inches (762 mm) in front. Light, ventilation and emergency egress conforming to this Title shall be provided.

D. Every building shall be provided with at least one water closet. Every hotel or subdivision thereof where both sexes are accommodated shall contain at least two separate toilet facilities which are conspicuously identified for male and female use, each of which contains at least one water closet.

EXCEPTION: SRO Hotel guest rooms may have one unidentified toilet facility.

E. Additional water closets shall be provided on each floor for each sex at the rate of one for every additional ten guests, or fractional thereof, in excess of ten.

F. Every SRO unit shall be provided with a kitchen equipped with a kitchen sink; however, that single room occupancy living unit facilities and single room occupancy residential hotels may contain

partial kitchen facilities so long as a sink is provided and laundry facilities and kitchen facilities are provided on each floor accessible from a public hallway.

G. Every SRO unit shall be provided with a bathroom equipped with facilities consisting of a water closet, lavatory and either a bathtub or shower; however, that single room occupancy residential hotels may contain partial bathroom facilities. If individual bath facilities are not provided, common bath facilities must be provided as follows:

1. Where private water closets, lavatories and baths are not provided, there shall be provided on each floor, for each sex, at least one water closet and lavatory and one bath, accessible from a public hallway.

2. Additional water closets, lavatories and baths shall be provided on each floor for each sex at the rate of one for every additional ten guests or fractional number thereof in excess of ten.

3. Such facilities shall be clearly marked for "men" or "women". As an alternative, adequate unisex facilities may be provided.

4. Each sink, lavatory and either a bathtub or shower shall be equipped with hot and cold running water necessary for its normal operation.

H. All SRO units shall comply with all applicable accessibility and adaptability requirements.

Chapter 16 – Structural Design

Modification to ASCE 7-05, Section 12.8.1.1

Equation 12.8-5 in Section 12.8.1.1 of ASCE 7-05 to be modified to read as follows:

$C_s = 0.044\, S_{DS}\, I \geq 0.01$

Modification to ASCE 7-05, Table 12.8-2

Modify ASCE 7-05 Table 12.8-2 to read as follows:

TABLE 12.8-2 VALUES OF APPROXIMATE PERIOD PARAMETERS C_t AND x

Structure Type	C_t	*x*
Moment-resisting frame systems in which the frames resist 100% of the required seismic force and are not enclosed or adjoined by components that are more rigid and will prevent frames from deflecting where subjected to seismic forces: Steel moment-resisting frame	*0.028 (0.0724)[a]*	*0.8*
Concrete moment-resisting frames	*0.016 (0.0466)[a]*	*0.9*
Eccentrically braced steel frames and buckling-restrained braced frames	*0.03 (0.0731)[a]*	*0.75*
All other structural systems	*0.02 (0.0488)[a]*	*0.75*

a – Metric values are in parenthesis.

Modification to ASCE 7-05, Section 12.8.7

Modify ASCE 7-05 Section 12.8.7 by amending Equation 12.8-16 to read as follows:

$\theta = (P_x \Delta \underline{I}) / (V_x h_{sx} C_d)$ *(12.8-16)*

Modification to ASCE 7-05, Section 12.12.3

Delete ASCE 7-05, Section 12.12.3 and replace with the following:

12.12.3 Minimum Building Separation*. All structures shall be separated from adjoining structures. Separations shall allow for the maximum inelastic response displacement (ΔM). ΔM shall be determined at critical locations with consideration for both translational and torsional displacements of the structure as follows:*

$\Delta_M = C_d \delta_{max}$ *(Equation 16-45)*

where δ_{max} *is the calculated maximum displacement at Level x as defined in ASCE 7 Section 12.8.4.3.*
Adjacent buildings on the same property shall be separated by at least a distance ΔMT, where

$\Delta_{MT} = [(\Delta_{M1})^2 + (\Delta_{M2})^2]^{1/2}$ *(Equation 16-46)*

and Δ_{M1} *and* Δ_{M2} *are the maximum inelastic response displacements of the adjacent buildings.*

Where a structure adjoins a property line not common to a public way, the structure shall also be set back from the property line by at least the displacement, Δ_M*, of that structure.*

> ***Exception****: Smaller separations or property line setbacks may be permitted when justified by rational analysis.*

Modification to ACI 318 Sections 14.8.3 and 14.8.4

Delete ACI 318 Section 14.8.3 and 14.8.4 and replace with the following:

14.8.3 *The design moment strength* ΦM_n *for combined flexure and axial loads at the mid-height cross section shall be*

$\Phi M_n \geq M_u$ *(14-3)*

Where:

$M_u = M_{ua} + P_U \Delta_u$ *(14-4)*

M_{ua} *is the moment at the mid-height section of the wall due to factored lateral and eccentric vertical loads, not including* $P\Delta$ *effects, and* Δ_u *is:*

$$\Delta_u = \frac{5 M_u l_c^{\,2}}{(0.75) 48 E_c I_{cr}} \qquad \textit{(14-5)}$$

Mu shall be obtained by iteration of deflections, or by direct calculation using Equation (14-6).

$$M_u = \frac{M_{ua}}{1 - \frac{5P_u l_c^2}{(0.75)48E_c I_{cr}}} \qquad (14\text{-}6)$$

I_{cr} shall be calculated by Equation (14-7), and M_a shall be obtained by iteration of deflections.

$$I_{cr} = \frac{E_s}{E_c}\left(A_s + \frac{P_u}{f_y}\frac{h}{2d}\right)(d-c)^2 + \frac{l_w c^3}{3} \qquad (14\text{-}7)$$

and the value E_s/E_c shall not be taken less than 6.

***14.8.4** Maximum out-of-plane deflection, Δ_s, due to service loads, including PΔ effects, shall not exceed $l_c/150$. If M_a, maximum moment at mid-height of wall due to service lateral and eccentric loads, including PΔ effects, exceed (2/3) M_{cr}, Δ_s shall be calculated by Equation (14-8):*

$$\Delta s = \frac{2}{3}\Delta_{cr} + \frac{M_a - \frac{2}{3}M_{cr}}{M_n - \frac{2}{3}M_{cr}}\left(\Delta_n - \frac{2}{3}\Delta_{cr}\right) \qquad (14\text{-}8)$$

If M_a does not exceed (2/3) M_{cr}, Δ_s shall be calculated by Equation (14-9):

$$\Delta_s = \left(\frac{M_a}{M_{cr}}\right)\Delta_{cr} \qquad (14\text{-}9)$$

where:

$$\Delta cr = \frac{5M_{cr}l_c^{\,2}}{48E_c I_g}$$

Chapter 17 – Structural Test and Special Inspections

Revise section 1704.4 to read as follows:

1704.4 Concrete Construction*. The special inspections and verifications for concrete construction shall be as required by this section and Table 1704.4.*

Exceptions: *Special inspection shall not be required for:*

1. *Isolated spread concrete footings of buildings three stories or less in height that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa).*
2. *Continuous concrete footings supporting walls of buildings three stories or less in height that are fully supported on earth or rock where:*
   - *2.1. The footings support walls of light-frame construction;*
   - *2.2. The footings are designed in accordance with Table 1805.4.2; or*
   - *2.3. The structural design of the footing is based on a specified compressive strength, f'c, no greater than 2,500 pounds per square inch (psi) (17.2 Mpa), regardless of the compressive strength specified in the construction documents or used in the footing construction.*
3. *Nonstructural concrete slabs supported directly on the ground, including prestressed slabs on grade, where the effective prestress in the concrete is less than 150 psi (1.03 Mpa).*
4. *Concrete foundation walls constructed in accordance with table 1805.5(5).*
5. *Concrete patios, driveways and sidewalks, on grade.*

Chapter 23 – Wood

Sections 2306.4.5 and Table 2306.4.5 will not be adopted.

Table 2305.3.4

Table 2305.3.4 to be deleted and replaced with the following:

TABLE 2305.3.4
MAXIMUM SHEAR WALL DIMENSION RATIOS

TYPE	***MAXIMUM HEIGHT-WIDTH RATIO***
Wood structural panels or particleboard, nailed edges	*For other than seismic: 3½:1* *For seismic: 2:1[a]*
Diagonal sheathing, single	*2:1*
Fiberboard	*1½:1*

a. For design to resist seismic forces, shear wall height-width ratios greater than 2:1, but not exceeding 3½:1, are not permitted provided the allowable shear values in Table 2306.4.1 are multiplied by 2w/h.

Section 2305.3.9 is deleted and replaced with the following:

2305.3.9 Summing shear capacities. *The shear values for shear panels of different capacities applied to the same side of the wall are not cumulative except as allowed in Table 2306.4.1.*

The shear values for material of the same type and capacity applied to both faces of the same wall are cumulative. Where the material capacities are not equal, the allowable shear shall be either two times the smaller shear capacity or the capacity of the stronger side, whichever is greater.

Summing shear capacities of dissimilar materials applied to opposite faces or to the same wall line is not allowed.

Revise Section 2308.3.4 to read s follows:

2308.3.4 Braced wall line support*. Braced wall lines shall be supported by continuous foundations.*

Exceptions:

1. *One-story buildings with maximum plan dimension not exceeding 50 feet (15240 mm), may have continuous foundations located at exterior braced wall lines only.*
2. *Two-story buildings with a maximum plan dimension not exceeding 50 feet (5240 mm) may have braced wall lines supported on continuous foundations at the exterior walls only, provided:*
   a. *Cripple walls do not exceed 4 feet (1219 mm) in height.*
   b. *Where the first story is supported on a raised wood framed floor, the interior braced wall panels are directly supported either by doubled joists, continuous 4x blocking or minimum 4x floor beams.*

Section 2308.9.3 is deleted and replaced with the following:

2308.9.3 Bracing.

A. Braced wall lines shall consist of braced wall panels which meet the requirements for location, type and amount of bracing as shown in Figure 2308.9.3, specified in Table 2308.9.3(1) and are in line or offset from each other by not more than 4 feet (1219 mm). Braced wall panels shall start not more than 12.5 feet (3810 mm) from each end of a braced wall line. Braced wall panels shall be clearly indicated on the plans. Construction of braced wall panels shall be by one of the following methods:

1. *Wood boards of 5/8-inch (16 mm) net minimum thickness applied diagonally on studs spaced not over 24 inches (610 mm) on center.*
2. *Wood structural panel sheathing with a thickness not less than 5/16-inch (7.9 mm) for 16-inch (406 mm) stud spacing and not less than 3/8-inch (9.5 mm) for 24-inch (610 mm) stud spacing in accordance with Tables 2308.9.3(2) and 2308.9.3(3).*
3. *Fiberboard sheathing 4-foot by 8-foot (1219 mm by 2438 mm) panels not less than 1/2-inch (13 mm) thick applied vertically on studs spaced not over 16-inches (406 mm) on center when installed in accordance with Section 2306.4.4 and Table 2306.4.4.*
4. *Particleboard wall sheathing panels where installed in accordance with Table 2308.9.3(4).*

5. *Portland cement plaster on studs spaced 16-inches (406 mm) on center installed in accordance with Section 2510. Limited to one story structures of R-3 and U-1 occupancies. The maximum height-to-width ratio of the braced panels shall be 1.5:1 and 2:1 for unblocked and blocked construction, respectively.*

6. *Hardboard panel siding when installed in accordance with Section 2303.1.6 and Table 2309.9.3(5).*

For cripple wall bracing see Section 2308.9.4.

For methods, 1, 2, 3, 4, 5 and 6, each braced wall panel must be at least 48-inches (1219 mm) in length, covering three stud spaces where studs are 16-inches (406 mm) apart and covering two stud spaces where studs are spaced 24-inches (610 mm) apart.

B. All vertical joints of panel sheathing shall occur over studs. Horizontal joints shall occur over blocking equal in size to the studding except where waived by the installation requirements for the specific sheathing materials.

C. Braced wall panel sole plates shall be nailed to the floor framing and top plates shall be connected to the framing above in accordance with Table 2304.9.1. Sills shall be bolted to the foundation or slab in accordance with Section 1805.6. Where joists are perpendicular to braced wall lines above, blocking shall be provided under and in line with the braced wall panels.

Section 2308.12.4, to be revised as the following:

2308.12.4 Braced wall line sheathing. *Braced wall lines shall be braced by one of the types of sheathing prescribed by Table 2308.12.4 as shown in Figure 2308.9.3. The sum of lengths of braced wall panels at each braced wall line shall conform to Table 2308.12.4. Braced wall panels shall be distributed along the length of the braced wall line and start at not more than 8 feet (2438 mm) from each end of the braced wall line. Sheathing shall be fastened to studs, top and bottom plates and at panel edges occurring over blocking. Wall framing to which sheathing used for bracing is applied shall be nominal 2 inch wide [actual 1.5 inch (38 mm)] or larger members, spaced a maximum of 16 inches on center. Nailing shall be minimum 8d common placed 3/8 inches from panel edges and spaced not more than 6 inches on center, and 12 inches on center along intermediate framing members.*

Table 2308.12.4 to be deleted and replaced with the following:

TABLE 2308.12.4
WALL BRACING IN SEISMIC DESIGN CATEGORIES D AND E
(Minimum Length of Wall Bracing per each 25 Linear Feet of Braced Wall Line[a])

CONDITION	*SHEATHING TYPE[b]*	*S_{DS}<0.50*	*0.50 ≤ S_{DS} <0.75*	*0.75 ≤ S_{DS} ≤1.00*	*S_{DS} >1.00*
One Story	*G-P[c]*	*10 feet 8 inches*	*14 feet 8 inches*	*18 feet 8 inches*	*25 feet 0 inches*
	S-W	*5 feet 4 inches*	*8 feet 0 inches*	*9 feet 4 inches*	*12 feet 0 inches*
Story below top story [HCD 1]	*G-P[c,d]*	*18 feet 8 inches[d]*	*NP*	*NP*	*NP*
	S-W[d]	*10 feet 8 inches*	*13 feet 4 inches[d]*	*17 feet 4 inches[d]*	*21 feet 4 inches[d]*
Bottom-story of three stories [HCD 1]	*G-P*	*Conventional construction not permitted; conformance with Section 2301.2, Item 1 or 2 is required*			
	S-W				

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

1. *Minimum length of panel bracing of one face of the wall for S-W sheathing or both faces of the wall for G-P sheathing; h/w ratio shall not exceed 2:1. For S-W panel bracing of the same material on two faces of the wall, the minimum length is permitted to be one-half the tabulated value but the h/w ratio shall not exceed 2:1 and design for uplift is required.*
2. *G-P= fiberboard, particleboard; S-W = wood structural panels and diagonal wood sheathing. NP = not permitted.*
3. *Nailing as specified below shall occur at all panel edges at studs, at top and bottom plates and, where occurring, at blocking: For fiberboard and particleboard, No. 11 gage (0.120 inch) by 1½ inches long, $^{7}/_{16}$ inch head, galvanized nails at 3 inches on center.*
4. *[HCD 1] Applies to detached one- and two- family dwellings only.*

Revise Section 2308.12.5 to read as follows:

2308.12.5 Attachment of sheathing. *Fastening of braced wall panel sheathing shall not be less than that prescribed in Table 2308.12.4 or 2304.9.1. Wall sheathing shall not be attached to framing members by adhesives.*

All braced wall panels shall extend to the roof sheathing and shall be attached to parallel roof rafters or blocking above with framing clips (18 gauge minimum) spaced at maximum 24 inches (6096 mm) on center with four 8d nails per leg (total eight 8d nails per clip). Braced wall panels shall be laterally braced at each top corner and at maximum 24 inch (6096 mm) intervals along the top plate of discontinuous vertical framing.

Chapter 25 – Gypsum Board and Plaster

Section 2505 will not be adopted

Chapter 34 – Existing Structures

The following definitions shall be added to Section 3402.1 of CBC:

Substantial Structural Damage. *A condition where:*

1. *In any story, the vertical elements of the lateral-force-resisting system, have suffered damage such that the lateral load-carrying capacity of the structure in any direction has been reduced by more than 20 percent from its pre-damaged condition, or*
2. *The capacity of any vertical gravity load-carrying component, or any group of such components, that supports more than 30 percent of the total area of the structure's floor(s) and roof(s) has been reduced more than 20 percent from its pre-damaged condition, and the remaining capacity of such affected elements with respect to all dead and live loads is less than 75 percent of that required by the building code for new buildings of similar structure, purpose, and location.*

Add new subsection to Section 3403 of as follows:

3403.5 Repairs.

3403.5.1 Scope. *Repairs of structural elements shall comply with this section.*

3403.5.1.1 Seismic evaluation and design*. Seismic evaluation and design of an existing building and its components shall be based on the following criteria.*

3403.5.1.1.1 Evaluation and design procedures. *The seismic evaluation and design shall be based on the following procedures:*

a) As specified in the building code (Chapter 16)
b) ASCE 31 Seismic Evaluation of Existing Buildings (for evaluation only)
c) ASCE 41 Seismic Rehabilitation of Existing Buildings.
d) The procedures contained in Appendix Chapter A2 and Appendix Chapter A3 of the International Existing Building Code (IEBC) and Appendix Chapter A1 of California Existing Building Code (CEBC) shall be permitted to be used as specified in Section 3403.5.1.1.3.

3403.5.1.1.2 CBC level seismic forces. *When seismic forces are required to meet the building code level, they shall be one of the following:*

1. *100 percent of the values in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor specified for structural systems classified as "Ordinary" unless it can be demonstrated that the structural system satisfies the proportioning and detailing requirements for systems classified as "Intermediate" or "Special".*

2. *Forces corresponding to BSE-1 and BSE-2 Earthquake Hazard Levels defined in ASCE 41. Where ASCE 41 is used, the corresponding performance levels shall be those shown in Table 3403.5.1.1.2.*

TABLE 3403.5.1.1.2
ASCE 41 and ASCE 31 PERFORMANCE LEVELS

OCCUPANCY CATEGORY (BASED ON CBC TABLE 1604.5)	***PERFORMANCE LEVEL FOR USE WITH ASCE 31 AND WITH ASCE 41 BSE-1 EARTHQUAKE HAZARD LEVEL***	***PERFORMANCE LEVEL FOR USE WITH ASCE 41 BSE-2 EARTHQUAKE HAZARD LEVEL***
I	*Life Safety (LS)*	*Collapse Prevention (CP)*
II	*Life Safety (LS)*	*Collapse Prevention (CP)*
III	*Note (a)*	*Note (a)*
IV	*Immediate Occupancy (IO)*	*Life Safety (LS)*

a. Performance Levels for Occupancy Category III shall be taken as halfway between the performance levels specified for Occupancy Category II and Occupancy Category IV.

3403.5.1.1.3 Reduced CBC level seismic forces. *When seismic forces are permitted to meet reduced building code levels, they shall be one of the following:*

1. *75 percent of the forces prescribed in the building code. The R factor used for analysis in accordance with Chapter 16 of the building code shall be the R factor as specified in Section 3403.5.1.1.2.*
2. *In accordance with the applicable chapters in Appendix A of the International Existing Building Code and California Existing Building Code, as specified in Items 2.1 through 2.3 below. Structures or portions of structures that comply with the requirements of the applicable chapter in Appendix A shall be deemed to comply with the require*
   - *2.1. The seismic evaluation and design of unreinforced masonry bearing wall buildings in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A1 of CEBC.*
   - *2.2. Seismic evaluation and design of the wall anchorage system in reinforced concrete and reinforcements for reduced building code force levels. masonry wall buildings with flexible diaphragms in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A2 of IEBC.*
   - *2.3. Seismic evaluation and design of cripple walls and sill plate anchorage in residential buildings of light-frame wood construction in Occupancy Category I or II are permitted to be based on the procedures specified in Appendix Chapter A3 of IEBC.*
3. *In accordance with ASCE 31 based on the applicable performance level as shown in Table 3403.5.1.1.2.*
4. *Those associated with the BSE-1 Earthquake Hazard Level defined in ASCE 41 and the performance level as shown in Table 3403.5.1.1.2. Where ASCE 41 is used, the design spectral response acceleration parameters S_{xs} and S_{x1} shall not be taken less than 75*

percent of the respective design spectral response acceleration parameters S_{DS} and S_{D1} defined by the California Building Code and its reference standards.

3403.5.1.2 Wind Design. *Wind design of existing buildings shall be based on the procedures specified in the building code.*

3403.5.2 Repairs to damaged buildings. *Repairs to damaged buildings shall comply with this section.*

3403.5.2.1 Unsafe conditions. *Regardless of the extent of structural damage, unsafe conditions shall be eliminated.*

3403.5.2.2 Substantial structural damage to vertical elements of the lateral–force-resisting system. *A building that has sustained substantial structural damage to the vertical elements of its lateral-force-resisting system shall be evaluated and repaired in accordance with the applicable provisions of Section 3403.5.2.2.1 through 3403.5.2.2.3.*

3403.5.2.2.1 Evaluation. *The building shall be evaluated by a registered design professional, and the evaluation findings shall be submitted to the code official. The evaluation shall establish whether the damaged building, if repaired to its pre-damage state, would comply with the provisions of the building code.*

- *Wind forces for this evaluation shall be those prescribed in the building code.*
- *Seismic forces for this evaluation are permitted to be the reduced level seismic forces specified in Code Section 3403.5.1.1.3.*

3403.5.2.2.2 Extent of repair for compliant buildings. *If the evaluation establishes compliance of the pre-damage building in accordance with Section 3403.5.2.2.1, then repairs shall be permitted that restore the building to its pre-damage state, using materials and strengths that existed prior to the damage.*

3403.5.2.2.3 Extent of repair for non-compliant buildings. *If the evaluation does not establish compliance of the pre-damage building in accordance with Section 3403.5.2.2.1, then the building shall be rehabilitated to comply with applicable provisions of the building code for load combinations including wind or seismic forces.*

1. ***Wind.*** *The wind design level for the repair shall be as required by the building code in effect at the time of original construction unless the damage was caused by wind, in which case the design level shall be as required by the code in effect at the time of original construction or as required by the building code, whichever is greater.*
2. ***Seismic.*** *Seismic forces for this rehabilitation design shall be those required for the design of the pre-damaged building, but not less than the reduced level seismic forces specified in Section 3403.5.1.1.3. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.*

3403.5.2.3 Substantial structural damage to vertical load-carrying components. *Vertical load-carrying components that have sustained substantial structural damage shall be rehabilitated to*

comply with the applicable provisions for dead and live loads in the building code. Undamaged vertical load-carrying components that receive dead or live loads from rehabilitated components shall also be rehabilitated to carry the design loads of the rehabilitation design. New structural members and connections required by this rehabilitation design shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.

3403.5.2.3.1 Lateral force-resisting elements. *Regardless of the level of damage to vertical elements of the lateral force-resisting system, if substantial structural damage to vertical load-carrying components was caused primarily by wind or seismic effects, then the building shall be evaluated in accordance with Section 3403.5.2.2.1 and, if non-compliant, rehabilitated in accordance with Section 3403.5.2.2.3.*

3403.5.2.4 Less than substantial structural damage. *For damage less than substantial structural damage, repairs shall be allowed that restore the building to its pre-damage state, using materials and strengths that existed prior to the damage. New structural members and connections used for this repair shall comply with the detailing provisions of the building code for new buildings of similar structure, purpose, and location.*

3403.5.3 Referenced Standards

Standard Referenced Number	*TITLE*	*Reference In Code Section Number*
ASCE 31-03	*Seismic Evaluation of Existing Buildings*	*3403.5.1.1.1, TABLE 3403.5.1.1.2, 3403.5.1.1.3*
ASCE 41-06	*Seismic Rehabilitation of Existing Buildings*	*3403.5.1.1.1, 3403.5.1.1.2, TABLE 403.5.1.1.2, 3403.5.1.1.3*

Subsection 3406.4 to be deleted and replaced with the following:

3406.4 Change of Occupancy. *When a building or portion thereof is subject to a change of occupancy such that a change in the nature of the occupancy results in a higher seismic occupancy factor based on Table 1604.5; or where such change of occupancy results in a reclassification of a building to a higher*

hazard category as shown in Table 3406.4; or where a change of a Group M occupancy to a Group A, E, I-1, R-1, R-2, or R-4 occupancy with two-thirds or more of the floors involved in alteration work and total accumulated work area exceeds 50% of the aggregate area of the building, the building shall conform to the seismic requirements of the Building Code for a new structure.

Exceptions:

1. *Specific detailing provisions required for a new structure are not required to be met where it can be shown that an acceptable level of performance and seismic safety is obtained for the applicable occupancy category using reduced CBC level seismic forces as prescribed in Section 3403.5.1.1.3. The rehabilitation procedures shall be approved by the code official and shall consider the regularity, overstrength, redundancy and ductility of the lateral-load-resisting system within the context of the existing detailing of the system.*
2. *When a change of use results in a structure being reclassified from Occupancy Category I or II to Occupancy Category III and the structure is located in a seismic map area where $S_{DS} < 0.33$, compliance with the seismic requirements of this code and ASCE 7 are not required.*
3. *Where the area of the new occupancy with a higher hazard category is less than or equal to 10 percent of the total building floor area and the new occupancy is not classified as Occupancy Category IV. For the purposes of this exception, where a structure is occupied for two or more occupancies not included in the same occupancy category, the structure shall be assigned the classification of the highest occupancy category corresponding to the various occupancies. Where structures have two or more portions that are structurally separated, each portion shall be separately classified. Where a structurally separated portion of a structure provides required access to, required egress from or shares life safety components with another portion having a higher occupancy category, both portions shall be assigned the higher occupancy category. The cumulative effect of the area of occupancy changes shall be considered for the purposes of this exception.*

TABLE 3406.4
OCCUPANCY HAZARD CATEGORIES

RELATIVE HAZARD	***OCCUPANCY CLASSIFICATIONS***
1 (Highest Hazard)	*H*
2	*I-2, I-3, I-4*
3	*A, E, I-1, M, R-1, R-2, R-4*
4	*B, F-1, R-3, S-1*
5 (Lowest Hazard)	*F-2, S-2, U*

Adopt the following Appendices:

1. Appendix C, Agricultural Buildings
2. Appendix I, Patio Cover
3. Appendix G, Grading

CITY OF SAN JOSE
THE 2007 CALIFORNIA ELECTRICAL CODE
CCR Title 24, Part 3
(final version)

No proposed amendment to the 2007 California Electrical Code.

CITY OF SAN JOSE
THE 2007 CALIFORNIA MECHANICAL CODE
CCR Title 24, Part 4
(final version)

No proposed amendment to the 2007 California Mechanical Code.

CITY OF SAN JOSE
PROPOSED AMENDMENTS
TO
THE 2007 CALIFORNIA PLUMBING CODE
CCR Title 24, Part 5
(final version)

Chapter 4 – Plumbing Fixture and Fixture Fittings

- Sections 412.3, 412.5 and 412.6 and Table 4-1 will not be adopted.
- Adopt Chapter 16, Part II – Reclaimed Water Systems.

CITY OF SAN JOSE
THE 2007 CALIFORNIA HISTORICAL BUILDING CODE
CCR Title 24, Part 8
(final version)

No proposed amendment to the 2007 California Historical Building Code.

CITY OF SAN JOSE
PROPOSED AMENDMENTS
TO
2007 CALIFORNIA EXISTING BUILDING CODE
CCR Title 24, Part 10
(final version)

Adopt the 2007 California Existing Building Code and the following Appendices of the 2006 International Existing Building Code:

A. Appendix Chapter A2, Earthquake Hazard Reduction in Existing Reinforced Concrete and Reinforced Masonry Wall Buildings with Flexible Diaphragms.

B. Appendix Chapter A3, Prescriptive Provisions for Seismic Strengthening of Cripple Walls and Sill Plate Anchorage of Light, Wood-Frame Residential Buildings.